

MEMS SENSOR FOR DETECTING
STRESS CORROSION CRACKING

ABSTRACT OF THE DISCLOSURE

5 A sensor for measuring stress corrosion cracking and
 methods of using the sensor. The sensor is a MEMS device
 and has a cantilevered beam made from a material of
 interest. The sensor has on-chip electrical connections
 for measuring electrical characteristics that indicate
 cracking of the beam. The sensor may further have on-
 chip actuators for applying stress to the beam.